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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,768	09/29/2003	Satoshi Yamamoto	HSJ920030123US1	2474
35987	7590	12/14/2004	EXAMINER	
JOSEPH P. CURTIN 1469 N.W. MORGAN LANE PORTLAND, OR 97229			OLSON, JASON C	
		ART UNIT	PAPER NUMBER	
		2651		
DATE MAILED: 12/14/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/673,768	YAMAMOTO, SATOSHI	
Examiner	Art Unit		
Jason C Olson	2651		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 September 2003.

2a)  This action is FINAL.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-9 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 29 September 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All   b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09/29/03

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

Claim 1 is objected to because of the following informalities: apparatus claim reciting method claim language. In claim 1, in line 15, the claim recites, "terminating the method for setting.." and in line 20, the claim recites, "and (g) repeating steps (a) through..". Claim 1 is an apparatus claim and cannot use language reserved for method claims, such as, "method" or "steps". Appropriate correction is required.

Claim 1 is objected to because of the following informalities: claim 1 recites the limitation "the initial servo track pitch" in line 15. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/673,771. Although the conflicting claims are not identical, they are not

patentably distinct from each other because instantaneous application claims the apparatus corresponding to the method that is claimed in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### *Allowable Subject Matter*

Claims 1-9 are allowed. The prior art fails to teach alone or in combination changing a bias voltage applied to a secondary actuator by a predetermined bias voltage increment for a predetermined number of times to change the position of a read/write head a corresponding number of times and writing a burst pattern on at least one hard disk at each respective changed position of the read/write head; determining an amount of overlap for at least one selected burst pattern having two burst patterns that are adjacent to the burst pattern; terminating the method for setting the initial servo track pitch when the amount of overlap determined for each selected burst pattern is within a selected criterion of a predetermined target overlap value; increasing the predetermined bias voltage increment when the amount of overlap for each selected burst pattern is greater than the predetermined target overlap value, and decreasing the predetermined bias voltage increment when the amount of overlap for each selected burst pattern is less than the predetermined target overlap value; and repeating the steps with the new predetermined bias voltage increment.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Deng et al. (US 6,493,176) is cited for variable TPI servo tracks. Yarmchuk (US

6,344,942) is cited for absolute track spacing determination for self-servowriting. Yatsu (US 6,738,215) is cited for accurate self-servowriting by using relative position between read and writing surfaces. Chainer et al. (US 6,611,395) is cited for adaptive track density. Chainer et al. (US 6,603,627) is cited for creating an initial set of tracks in a self-servowriting system. Ogasawara et al. (US 6,466,387) is cited for reducing wasted space on a data recording cisk. Codilian et al. (US 6,788,480) is cited for determining track density during a servo-track writing operation. Bi et al. (US 6,693,763) is cited for microactuator hysteresis for a disc drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C Olson whose telephone number is 703.305.8325. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703)308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCO  
December 10, 2004

  
SINH TRAN  
PRIMARY EXAMINER